

# VHF POWER MOSFET

## N-Channel Enhancement Mode

**DESCRIPTION:**

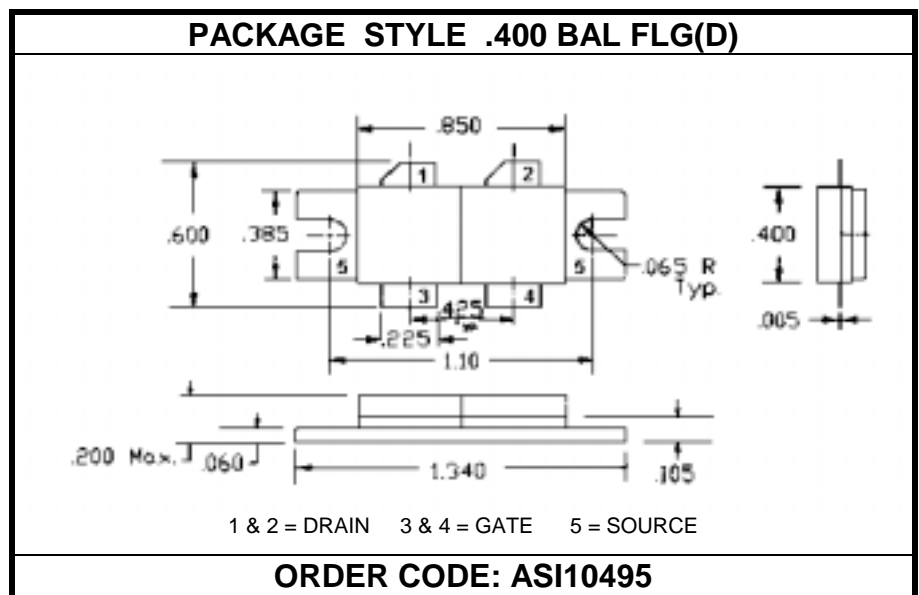
The **ASI BLF248** is a Balanced N-Channel Enhancement-Mode RF Power MOSFET Designed for AM and FM Power Amplifier Applications up to 250 MHz.

**FEATURES INCLUDE:**

- $P_G = 11$  dB Typical at 225 MHz
- 5:1 Load VSWR Capability
- *Omnigold*<sup>TM</sup> metalization system

**MAXIMUM RATINGS**

$I_D$	40 A
$V_{DSS}$	65 V
$V_{GS}$	$\pm 40$ V
$P_{DISS}$	500 W @ $T_C = 25^\circ C$
$T_J$	$-65^\circ C$ to $+150^\circ C$
$T_{STG}$	$-65^\circ C$ to $+200^\circ C$
$\theta_{JC}$	$0.35^\circ C/W$


**CHARACTERISTICS**  $T_C = 25^\circ C$ 

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{DSS}$	$I_D = 100$ mA	65			V
$I_{DSS}$	$V_{DS} = 28$ V $V_{GS} = 0$ V			5.0	mA
$I_{GSS}$	$V_{DS} = 0$ V $V_{GS} = 20$ V			1.0	$\mu A$
$V_{GS(th)}$	$V_{DS} = 10$ V $I_D = 100$ mA	1.0		5.0	V
$g_{fs}$	$V_{DS} = 10$ V $I_D = 5.0$ A	3,500			mS
$C_{iss}$	$V_{DS} = 50$ V $V_{GS} = 0$ V $f = 1.0$ MHz		380		pF
$C_{oss}$			190		
$C_{rss}$			25		
$P_G$	$V_{DD} = 28$ V $I_{DQ} = 2 \times 250$ mA $P_{out} = 300$ W	10	11		dB
$\eta_D$	$f = 225$ MHz	50	55		%
$\psi$	$V_{SWR} = 5:1$ AT ALL PHASE ANGLES	NO DEGRADATION IN OUTPUT POWER			